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EXAMINER

DUBASKY, GIGIL

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/587,937	<b>Applicant(s)</b> NAHUMI ET AL.	
	<b>Examiner</b> GIGI DUBASKY	<b>Art Unit</b> 4126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/02/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/02/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Drawings***

1. Figure 1 and Figure 3A should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 5, 7, 25-26, 28, 30, 32 and 34-35 are objected to because of the following informalities:

Claim 5 recites "any combination thereof" in line 10 and claim 25 recites "a combination thereof". They appear to be indefinite terms.

Claim 7 recites the limitation "the components" in line 21. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to -- components-- or define a component earlier in the claim.

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Claim 26 in line 1-2 and claim 28 in line 20 recite the limitation “the capacity”.

There are insufficient antecedent basis for this limitation in the claims. It is suggested to amend to –a capacity-- or define a capacity earlier in the claim.

Claim 30 in line 31 recites the limitation “the application”. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to –an application-- or define a component earlier in the claim.

Claim 32 recites that is a dependent claim of claim 30. However, based on the language and scope of claim, claim 32 should be proper dependent on claim 31. On the purpose of expediting the prosecution, Examiner analyzes claim 32 as a dependent claim of claim 31.

Claim 34 and claim 35 recite both of them are dependent claims of claim 32. However, based on the language and scope of claim, claim 34 and claim 35 should be proper dependent on claim 33. On the purpose of expediting the prosecution, Examiner analyzes claim 34 and claim 35 as dependent claims of claim 33 respectively.

3. Appropriate corrections are required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2, 5-6, 9-10, 15-17, 22-26, 29, 31-32, 36 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by McEvilly et al (US 2005/0132101).

Regarding claim 1, McEvilly discloses a Digital Subscriber Line Access Multiplexer (DSLAM) (see Figure 2; paragraph [0027], lines 8-12) comprising:  
a network side interface adapted to receive a plurality of communication signals conveyed along a broadband network (element 31 in Figure 3 and Figure 10-11; paragraph [0007], lines 4-5, paragraph [0024], lines 1-3 and paragraph [0031], lines 2-4, but not limited to);  
a storage means adapted to receive at least some of said plurality of communication signals, associate corresponding priorities with the communication signals received thereat, and store their content in accordance with at least one of the associated priorities (element 10 in Figure 1 or element 35 in Figure 3 and Figure 10-11; paragraph [0006], lines 4-10, paragraph [0008], lines 4-11, paragraph [0024], lines 7-8, paragraph [0034], paragraph [0036], paragraph [0054], lines 10-11, and paragraph

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[0062], but not limited to. McEvilly teaches the cyclically processing data in buffer using first in first out scheme. This is also one of priority scheme in processing data. So the stream 1 come before and has higher priority than stream 2);

multiplexing means operative to retrieve content stored in said storage means and multiplex the content thus received with run time data received at said network side interface into a multiplexed product, wherein said operation is carried while ensuring a minimum pre-defined quality of service for the multiplexed product (element 131 in Figure 10-11 or element 81 in Figure 6; paragraph [0024], lines 10-13, paragraph [0025], lines 1-5, paragraph [0035], lines 6-12, paragraph [0053], lines 19-37 and paragraph [0054], lines 24-26, but not limited to);.

a subscribers' output interface adapted to receive said multiplexed product from the multiplexing means and forward it along a communication line extending towards a subscriber (element 39 in Figure 3 and Figure 10-11; paragraph [0053], lines 19-24 and paragraph [0054], lines 26-30, but not limited to); and

a subscribers' input interface adapted to receive information generated by subscribers (paragraph [0024], lines 16-20 and paragraph [0067], lines 8-10, but not limited to. Any devices that enable to receive the requests or interactive information from users include the functionality of user interface).

Regarding claim 2, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses the retrieval of content stored in said storage means is carried in response to information received from one or more of the

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subscribers (paragraph [0024], lines 10-30 and paragraph [0034], lines 6-14, but not limited to).

Regarding claim 5, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses the communication signals are selected from the group consisting of: data signals, video signals, unicast video signals, multicast video signals, audio signals, voice signals and any combination thereof (paragraph [0004] and paragraph [0005], lines 4-7, but not limited to).

Regarding claim 6, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses the subscriber's output interface is further adapted to forward the multiplexed product in accordance with a bandwidth associated with said subscriber's communication line (paragraph [0050], and paragraph [0070], but not limited to).

Regarding claim 9, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses the application of a personal video recording is implemented by storing at said storage means part or all of multicast video streams, based on subscribers' commands (paragraph [0024] and paragraph [0069], but not limited to).

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Regarding claim 10, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses the multiplexed product is a video stream adapted to be shared by a plurality of subscribers (paragraph [0004], lines 9-15 and paragraph [0034], but not limited to).

Regarding claim 15, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses a storage adapted to hold a plurality of multicast video signals and identifies at least one of said multicast video signals that is in conformity with information generated by a subscriber and received at said subscribers, input Interface (paragraph [0006], and paragraph [0024], but not limited to).

Regarding claim 16, McEvilly discloses the DSLAM as discussed in the rejection of claim 15. McEvilly further discloses to unicast said at least one of said video signals identified, to the subscriber generating the information (paragraph [0023], lines 10-13, paragraph [0026], lines 1-4 and paragraph [0070], lines 1-2, but not limited to).

Regarding claim 17, McEvilly discloses the DSLAM as discussed in the rejection of claim 15. McEvilly further discloses the information generated by the subscriber is derived from a change in a channel being viewed (paragraph [0002], lines 5-10, paragraph [0023], lines 1-4, paragraph [0028], paragraph [0036], lines 8-12, but not limited to).



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Regarding claim 22, McEvilly discloses the DSLAM as discussed in the rejection of claim 17. McEvilly further discloses to forward to the subscriber said stored voice signal in response to information received from said subscriber (paragraph [0005], but not limited to).

Regarding claim 23, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses to associate one or more of the video signals stored at said storage means for a subscriber, and forward said one or more video signals to the subscriber in response to a command received from said subscriber (paragraph [0033]-[0035], but not limited to).

Regarding claim 24, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses the information received from the subscriber comprises media content and said media content is stored thereat (paragraph [0005], lines 4-7, paragraph [0006], lines 4-10 and paragraph [0024], lines 1-20, but not limited to).

Regarding claim 25, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses the storage means is a member of the group consisting of solid-state storage, a mechanical storage and a combination thereof (see elements 13, 10, 12 in Figure 1, buffer 35 in Figure 3 and Figure 10-11, buffer 57 in

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Figure 4 and Figure 12, buffer 83 in Figure 6; paragraph [0009], lines 10-14, paragraph [0054], lines 1-11, paragraph [0055], lines 5-9 and paragraph [0063], but not limited to).

Regarding claim 26, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses the part of the capacity of said storage means is reserved for media content associated with one or more of the subscribers (paragraph [0032]-[0034], but not limited to).

Regarding claim 29, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses any part of said storage means is adapted to be used by any of the subscribers associated with said DSLAM (see Figure 2-3 and Figure 10-11; paragraph [0054]-[0055], but not limited to).

Regarding claim 31, McEvilly discloses the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses at least part of said storage means is divided and each of its divided parts is associated with a subscriber so as to enable storage of information per that subscriber requirements and/or commands (see Figure 5; paragraph [0033]-0034], but not limited to).

Regarding claim 32, Examiner analyzes this claim as a dependent claim of claim 31 as discussed in the above Claim Objections section . McEvilly discloses the DSLAM as discussed in the rejection of claim 31. McEvilly further discloses at least one of said divided parts is integrated with a broadband modem (element 27 in Figure 2) connecting

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said DSLAM with a subscriber (see Figure 5; paragraph [0033]-[0034] and paragraph [0043], but not limited to).

Regarding claim 36, McEvilly discloses a video broadcasting system adapted to provide TV broadcasting services and at least PVR services, which system comprises: broadcasting means operative to multicast video signals to a plurality of DSLAMs (see element 5 in Figure 1-2), each comprising:

a network side interface adapted to receive a plurality of video signals from said broadcasting means (element 31 in Figure 3-4 and Figure 10-12);

a storage means adapted to receive at least some of said plurality of video signals, and store their content (element 35 in Figure 3 and Figure 10-11);

a subscribers' output interface adapted to receive video signals from said DSLAM and forward it along a communication line extending towards a subscriber (element 39 in Figure 3, Figure 6 and Figure 10-11); and

a subscribers' input interface adapted to receive information generated by the subscribers (paragraph [0024], lines 16-20 and paragraph [0067], lines 8-10, but not limited to. Any devices that enable to receive the requests or interactive information from users include the functionality of user interface),

wherein said DSLAM is operative to start storing said multicasted video signals upon receiving a first command from said subscriber and convey the stored video signals to said subscriber upon receiving a second command from said subscriber (paragraph [0009], lines 10-14, paragraph [0054]-[0055], but not limited to).

Regarding claim 40, all the limitations of claim 40 are analyzed corresponding to all functionalities of claim 36. So claim 40 is rejected on the same ground as claim 36.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 41 is rejected under 35 U.S.C. 102(b) as being anticipated by Allegrezza et al (US 2004/0103437).

Regarding claim 41, Allegrezza discloses a method for managing storage capacity which comprises:

(i) determining whether a storage associated with at least one subscriber is partially or completely empty (step 305 in Figure 3; paragraph [0046], paragraph [0052], paragraph [0062]-[0063], paragraph [0068]-[0069], but not limited to);

(ii) if in the affirmative, determining whether high priority video stream data is available, and if such data available, storing some or all of said data at said storage (step 305, 310, 315, and 320 in Figure 3; paragraph [0046], paragraph [0052]-[0055], paragraph [0062]-[0063], paragraph [0068]-[0069], but not limited to);

(iii) determining whether said storage is still partially or completely empty after carrying out step (ii) (following the flow chart in Figure 3, after step 320, the flow chart goes back to step 305 to monitor and rank content files again and it keeps doing that until it

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reaches the threshold B direction. That meets claimed limitation) and if in the affirmative, determining whether low priority video stream data (at step 305, the content files are ranked in higher or lesser ranked content. Allegrezza discloses another way of ranking content is being used content which has high demand and relevant content which has lower demand (paragraph [0068], lines 10-13) is available, and if such data available, storing some or all of said data at said storage (step 305, 310 and 315 and 320 in Figure 3; paragraph [0046], paragraph [0052]-[0055], paragraph [0062]-[0063], paragraph [0068]-[0069], but not limited to.);

(iv) determining whether said storage is still partially or completely empty after carrying out step (iii) (following the flow chart in Figure 3, after step 320 the flow chart goes back to step 305 to monitor again and it keeps doing that until it reaches the threshold B direction. That meets claimed limitation) and if in the affirmative, determining whether there is Internet data available (Allegrezza's network system of transferring data includes Internet (paragraph [0019], lines 10-14), so Allegrezza's data also includes Internet data. Moreover, Allegrezza's IAMS could query Internet web sites (paragraph [0038], lines 5-7). That meets the claimed limitation of "Internet data available"), and if such data available, storing some or all of said data at said storage (step 305, 310 and 315 and 320 in Figure 3; paragraph [0046], paragraph [0052]-[0055], paragraph [0062]-[0063], paragraph [0068]-[0069], but not limited to); and

(v) repeating steps (i) to (iv) every pre-determined period of time (paragraph [0035]-[0036], but not limited to).

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In general, viewing Figure 3-4, the whole main idea of the operation described in Figure 3 or in Figure 4 has a functional equalization to the claimed limitations when using in the scenario that the characteristic monitored is the unused storage space on a server.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-4, 7, 11, 18-20, 27-28, 30, 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over McEvilly (US 2005/0132101) in view of Allegrezza et al (US 2004/0103437).

Regarding claim 3, McEvilly discloses all the limitations of the DSLAM as discussed in the rejection of claim 1.

McEvilly does not explicitly disclose the limitation of “pre-defined quality of service is determined based on a type of application characterizing the content of said multiplexed product”.

Allegrezza discloses the limitation of “pre-defined quality of service is determined based on a type of application characterizing the content of said multiplexed product” (paragraph [0009], lines 6-11, paragraph [0012], paragraph [0059] and paragraph [0063], but not limited to. Examiner interpreted pre-determined quality of demand based

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on characteristics of content file as pre-defined quality of service based on characteristics of content of the multiplexed product).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify McEvilly system's processing data scheme in buffer with the teaching of Allegrezza about ranking content file, so to provide an efficient management the storage capacity of server or apparatus.

Regarding claim 4, McEvilly discloses all the limitations of the DSLAM as discussed in the rejection of claim 1. McEvilly in view of Allegrezza (paragraph [0035], [0036], [0055] and [0059], but not limited to. "lesser-ranked content file" and "higher-ranked content file" are two among of many types of contents), with the same motivation as discussed in the rejection of claim 3, discloses the priority associated with said communication signals is based on a type of application by which the contents of said communication signals would be utilized.

Regarding claim 7, McEvilly discloses all the limitations of the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses the subscriber's output interface is further adapted to forward the multiplexed product (see Figure 10 and Figure 11).

McEvilly does not explicitly disclose the limitation of "forwarding multiplexed product in accordance with priorities associated with at least one of the components comprising the multiplexed product".

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Allegrezza discloses the limitation of “forwarding multiplexed product in accordance with priorities associated with at least one of the components comprising the multiplexed product” (paragraph [0013], paragraph [0022], but not limited to. Allegrezza teaches the nearer server stores the higher-demanded contents. It meets the claimed limitation).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify McEvilly system's with the teaching of Allegrezza, so to enable to efficiently manage the storage capacity of system in order to provide acceptable performance to the users at a reasonable cost to the system operator.

Regarding claim 11, McEvilly discloses all the limitations of the DSLAM as discussed in the rejection of claim 1. McEvilly in view of Allegrezza (paragraph [0012], paragraph [0019], lines 3-7, paragraph [0030] and paragraph [0042], but not limited to), with the same motivation as discussed in the rejection of claim 3, further discloses the storage means is further operative to allocate storage space to store the content of each of the communication signals that are stored.

Regarding claim 18, McEvilly in view of Allegrezza discloses the DSLAM as discussed in the rejection of claim 3. McEvilly (paragraph [0062], but not limited to) in view of Allegrezza (paragraph [0042] and [0055] , but not limited to) further discloses the storage means are adapted to allocate a pre-defined storage space for storing incoming communication signals.



Regarding claim 19, McEvilly in view of Allegrezza discloses the DSLAM as discussed in the rejection of claim 18. McEvilly in view of Allegrezza (paragraph [0012], [0022], [0032], [0035], and [0055]-[0057], but not limited to) further discloses the allocation is made in accordance with the type of application characterizing the content of said incoming communication signals.

Regarding claim 20, McEvilly in view of Allegrezza discloses the DSLAM as discussed in the rejection of claim 18. McEvilly in view of Allegrezza (paragraph [0047] and paragraph [0059], lines 1-4, but not limited to) further discloses the any information to be stored at said storage space after having said allocated storage space filled, shall replace the oldest information stored at said allocated storage space.

Regarding claim 27, McEvilly discloses all the limitations of the DSLAM as discussed in the rejection of claim 1. McEvilly in view of Allegrezza (paragraph [0043]-[0044], but not limited to), with the same motivation as discussed in the rejection of claim 3, discloses the storage means is further provided with storage formatting means, operative to allocate different storage sizes out of said storage means in accordance with the media content and/or application to be stored.

Regarding claim 28, McEvilly discloses all the limitations of the DSLAM as discussed in the rejection of claim 1. McEvilly in view of Allegrezza (paragraph [0059],

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lines 10-16, but not limited to. Allegrezza's teaching about expensive content files are allocated closer to customers who are willing to pay high price meets the claimed limitation), with the same motivation as discussed in the rejection of claim 3, discloses at least part of the capacity of said storage means is allocated so that to each of the subscribers associated with said DSLAM there is a defined and fixed capacity reserved.

Regarding claim 30, McEvilly discloses all the limitations of the DSLAM as discussed in the rejection of claim 1. McEvilly in view of Allegrezza (paragraph [0042]-[0043] and paragraph [0059], lines 10-16, but not limited to), with the same motivation as discussed in the rejection of claim 3, discloses the storage means is further provided with storage formatting means, operative to allocate different storage sizes in accordance with the application to be stored and a service provisioning agreement pre-signed with the respective subscribers.

Regarding claim 33, McEvilly discloses all the limitations of the DSLAM as discussed in the rejection of claim 1. McEvilly in view of Allegrezza (see Figure 1; each of VOD head end servers and VOD region server are the back up storage means), with the same motivation as discussed in the rejection of claim 3, discloses the backup storage means, operative to provide a backup for at least part of the communication signals' content stored at said storage means.

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Regarding claim 34, Examiner analyzes this claim as a dependent claim of claim 33 as discussed in the above Claim Objections section. McEvilly in view of Allegrezza discloses the DSLAM as discussed in the rejection of claim 33. McEvilly in view of Allegrezza (paragraph [0045], but not limited to) further discloses the backup storage is further provided with sorting means to determine the communications signals' content that will be stored at said backup storage means in accordance with at least one pre-defined criterion associated with the media content and/or application.

Regarding claim 35, Examiner analyzes this claim as a dependent claim of claim 33 as discussed in the above Claim Objections section. McEvilly in view of Allegrezza discloses the DSLAM as discussed in the rejection of claim 33. McEvilly in view of Allegrezza (paragraph [0045], but not limited to) further discloses backup storage is further provided with sorting means to determine the communications signals' content that will be stored at said backup storage means in accordance with a service agreement pre-signed with the respective subscribers.

10. Claims 8, 12-14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McEvilly (US 2005/0132101) in view of Clark et al (US 2006/0074750).

Regarding claim 8, McEvilly discloses all the limitations of the DSLAM as discussed in the rejection of claim 1. McEvilly further discloses subscriber's output

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interface is further adapted to forward the multiplexed product (taught by McEvilly; see Figure 10 and Figure 11).

McEvilly does not explicitly disclose the limitation of "a priority assigned to the multiplexed product by said multiplexing means".

Clark discloses the limitation of "a priority assigned to the multiplexed product by said multiplexing means" (paragraph [0013], paragraph [0021], lines 1-2, paragraph [0033], lines 3-5, paragraph [0034] and paragraph [0038], lines 8-9, but not limited to).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify McEvilly's system with the teaching of Clark's assigning priority for contents, so to provide a smooth and rapid response to all consumer requests so as not to detract from the consumer experience (taught by Clark; paragraph [0022], lines 11-13).

Regarding claim 12, McEvilly in view of Clark discloses the DSLAM as discussed in the rejection of claim 8. McEvilly in view of Clark (paragraph [0034], [0038], [0042] and [0074], but not limited to) further discloses the multiplexing means is further adapted to classify said multiplexed product in accordance with pre-defined criteria and assign priority to said multiplexed product in accordance with that classification.

Regarding claim 13, McEvilly in view of Clark discloses the DSLAM as discussed in the rejection of claim 12. McEvilly in view of Clark (paragraph [0021] and [0022], but

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not limited to) further discloses priority is assigned so as to assure a minimum quality of service required for the type of classification associated with said multiplexed product.

Regarding claim 14, McEvilly in view of Clark discloses the DSLAM as discussed in the rejection of claim 12. McEvilly (paragraph [0070], but not limited to) in view of Clark (paragraph [0004], lines 17-23 and paragraph [0035], but not limited to) further discloses the priority assigned to the multiplexed product is dependent upon at least some of the bandwidth limitations existing along the communication line extending towards the subscriber.

Regarding claim 21, McEvilly in view of Clark discloses the DSLAM as discussed in the rejection of claim 14. McEvilly (paragraph [0005], lines 4-7, but not limited to) in view of Clark (paragraph [0025], lines 4-5 and paragraph [0026], lines 9-14, but not limited to) further discloses the plurality of communication signals conveyed along a broadband network comprises at least a voice signal directed to a subscriber, and wherein said storage means is adapted to store said voice signal.

11. Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over McEvilly (US 2005/0132101) in view of Sheeran (US 6909726) and further in view of Clark (US 2006/0074750).

Regarding claim 37, McEvilly discloses a method for establishing a connection between a DSLAM and a subscriber for providing a video service to said subscriber

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(see Figure 2), which method comprises receiving a request initiated by a user for a video service (paragraph [0024], lines 16-18, paragraph [0028], lines 1-7 and paragraph [0065], lines 1-4, but not limited to); determining if the subscriber's request can be fulfilled by using a network PVR and if in the affirmative, storing the content of said multicasted stream at a storage comprised in said DSLAM, and upon receiving a command from said subscriber to provide said video service, transmitting stored video signals while continuing to store the incoming multicast signal at said storage (paragraph [0054]-[0055] and paragraph [0066], but not limited to).

McEvilly does not explicitly disclose the limitations of "determining whether a sufficient bandwidth has been allocated for said user to fulfill said request, and if not, rejecting said request; determining whether said request can be fulfilled by utilizing a channel broadcasted by a TV broadcasting service and if in the affirmative, connection between said subscriber and a multicast stream reaching said DSLAM, and comprises said channel".

Sheeran discloses the limitations of "determining whether a sufficient bandwidth has been allocated for said user to fulfill said request, and if not, rejecting said request; determining whether said request can be fulfilled by utilizing a channel broadcasted by a TV broadcasting service and if in the affirmative, connection between said subscriber and a multicast stream reaching said DSLAM, and comprises said channel" (Col 5, lines 29-39, but not limited to).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify McEvilly system with the Sheeran's bandwidth

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services, so to provide an optimizing bandwidth efficiencies in the media distribution (taught by Sheeran; Col 2, lines 19-21).

McEvilly in view of Sheeran does not disclose the priority-based content retrieval mechanism.

Clark discloses this priority-based content retrieval mechanism (abstract, paragraph [0021], lines 1-2, paragraph [0033], lines 1-5, paragraph [0034], lines 4-9 and paragraph [0042], but not limited to).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify McEvilly's system in view of Sheeran with the teaching of Clark's assigning priority for contents, so to provide a smooth and rapid response to all consumer requests so as not to detract from the consumer experience (taught by Clark; paragraph [0022], lines 11-13).

Regarding claim 38, McEvilly in view of Sheeran and further in view of Clark discloses the method as discussed in the rejection of claim 37. McEvilly in view of Sheeran and further in view of Clark further discloses if it is determined that the request cannot be thus fulfilled (taught by Sheeran; Col 5, lines 30-33, but not limited to), determining whether the requested content is available on local replica of a VoD server (taught by Sheeran; Col 4, lines 8-17) and if in the affirmative (taught by Clark; paragraph [0044], lines 7-12, but not limited to), setting a direct high priority (paragraph [0034], paragraph [0042], but not limited to), unicast connection between said VoD server and said subscriber, and forwarding the requested content to said subscriber

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(taught by Sheeran; Col 5, lines 40-45, but not limited to).

Regarding claim 39, McEvilly in view of Sheeran and further in view of Clark discloses the method as discussed in the rejection of claim 38. McEvilly in view of Sheeran (VOD server is taught by Sheeran; element 30 in Figure 1) and further in view of Clark further discloses in case the requested content is not available on local replica of a VoD server, retrieving said requested content from another VoD server associated with a network with which said local VoD server .is associated and transmitting said requested content to said subscriber (taught by Clark; paragraph [0023], lines 6-9, paragraph [0044], lines 7-9, paragraph [0045], lines 1-2, 13-14 and paragraph [0046], lines 4-6, but not limited to).

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kizhepat (US 2004/0028068) teaches the dual-mode network storage systems and methods.

White et al (US 6804825) teaches the video on demand methods and systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIGI DUBASKY whose telephone number is (571)270-



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5686. The examiner can normally be reached on Monday through Friday from 7:30am to 5:00pm with alternative Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on 571-272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Jason P Salce/  
Primary Examiner, Art Unit 2623

10/08/2008

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